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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>C12N 15/12, 5/10, 1/21, C07K 14/47, 16/18, A61K 38/17, C12Q 1/68</b>		<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 00/05374</b>
			<b>(43) International Publication Date:</b> 3 February 2000 (03.02.00)
<b>(21) International Application Number:</b> PCT/US99/16637		<b>(74) Agents:</b> BILLINGS, Lucy, J. et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US).	
<b>(22) International Filing Date:</b> 21 July 1999 (21.07.99)		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
<b>(30) Priority Data:</b> 60/093,827 22 July 1998 (22.07.98) US		<b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
<b>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application</b> US 60/093,827 (CIP) Filed on 22 July 1998 (22.07.98)		<b>(88) Date of publication of the international search report:</b> 15 June 2000 (15.06.00)	
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<b>(54) Title:</b> MOLECULES ASSOCIATED WITH CELL PROLIFERATION			
<b>(57) Abstract</b> <p>The invention provides human molecules associated with cell proliferation (MACP) and polynucleotides which identify and encode MACP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of MACP.</p>			

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# INTERNATIONAL SEARCH REPORT

Intern al Application No

PCT/US 99/16637

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C12N5/10 C12N1/21 C07K14/47 C07K16/18  
A61K38/17 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K A61K C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 98 12327 A (BAER RICHARD ;BOWCOCK ANNE M (US); UNIV TEXAS (US)) 26 March 1998 (1998-03-26) BE2: SeqIdNo.40: 99.7% identity in 345 bp overlap with SeqIdNo.6 / SeqIdNo.41: 98.8% identity in 80 aa overlap with SeqIdNo.1 --- -/-</p>	1-14,17, 19-21

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

11 January 2000

Date of mailing of the international search report

19. 04. 00

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# INTERNATIONAL SEARCH REPORT

Intern      al Application No  
PCT/US 99/16637

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>TAHIRA T ET AL: "Activation of human c-raf-1 by replacing the N-terminal region with different sequences" NUCLEIC ACIDS RESEARCH., vol. 15, no. 12, 25 June 1987 (1987-06-25), pages 4809-4820, XP002127228 99.7% identity in 322bp overlap with SeqIdNo.6 -&amp; DATABASE EMHUM3 [Online] E.M.B.L. Databases Accession Number: X06409, 2 April 1988 (1988-04-02) TAHIRA T ET AL: "Human mRNA fragment for activated c-raf-1 (exons 8-17)" XP002127230 99.7% identity in 322bp overlap with SeqIdNo.6 abstract</p>	1-14,17, 19-21
X	<p>PRIMIANO T ET AL: "Isolation of cDNAs representing dithiolethione-responsive genes" CARCINOGENESIS, vol. 17, no. 11, November 1996 (1996-11), pages 2297-2303, XP002127229 DIG-2: 92.4% identity in 79 aa overlap with SeqIdNo.1 -----</p>	1-14,17, 19-21

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 16637

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
**See FURTHER INFORMATION SHEET**
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-21 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/US 99/16637

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-21 ( all partially)

A substantially purified polypeptide comprising an amino acid sequence selected from the group consisting SeqIdNo.1 and fragments thereof; a substantially purified variant having at least 90% amino acid identity to said amino acid sequence; An isolated and purified polynucleotide encoding said polypeptide; an isolated and purified polynucleotide having at least 90% identity to said polynucleotide; an isolated and purified polynucleotide hybridising to said polynucleotide; an isolated and purified polynucleotide complementary to said polynucleotide; an isolated and purified polynucleotide comprising a polynucleotide sequence selected from the group consisting of SeqIdNo.6 and fragments thereof; corresponding recombinant DNA products and methods; A purified antibody to said polypeptide; a purified agonist to said polypeptide; a purified antagonist to said polypeptide; A pharmaceutical composition comprising said polypeptide, or said antagonist; A diagnostic method employing said polynucleotide.

2. Claims: 1-21 ( all partially)

As for subject 1 but respectively relating to SeqIdNo.2 and SeqIdNo.7

3. Claims: 1-21 ( all partially)

As for subject 1 but respectively relating to SeqIdNo.3 and SeqIdNo.8

4. Claims: 1-21 ( all partially)

As for subject 1 but respectively relating to SeqIdNo.4 and SeqIdNo.9

5. Claims: 1-21 ( all partially)

As for subject 1 but respectively relating to SeqIdNo.5 and SeqIdNo.10

# INTERNATIONAL SEARCH REPORT

### 1. Information on patent family members

Intern: \_\_\_\_\_ al Application No \_\_\_\_\_

PCT/US 99/16637

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9812327 A	26-03-1998	AU 4586697 A	14-04-1998
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